

# City of San Leandro

## Benchmark Study

**October 3, 2017**



# Annual Benchmark Study

Periods Ending December 31, 2016

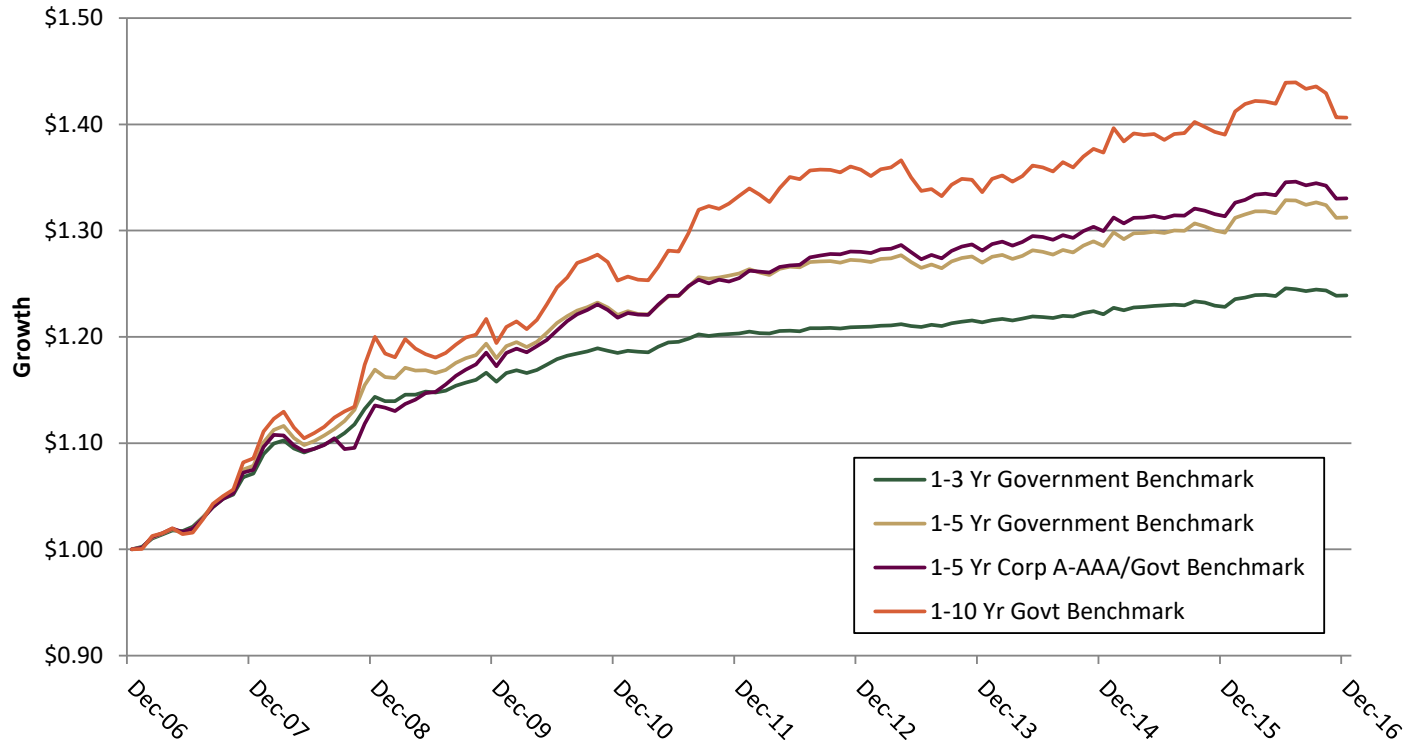
	B of A ML 1-3 Year US Treasury & Agency	B of A ML 1-5 Year US Treasury & Agency	B of A ML 1-5 Yr US Corporate/Govt Rated AAA-A	B of A ML 1-10 Yr US Treasury & Agency
<b>Maturity Composition</b>				
0-6 months				
6-12 months				
1-3 years	100%	58%	58%	42%
3-5 years		42%	42%	30%
5-10 years				28%
<b>Asset Sector Distribution</b>				
Treasury	92%	94%	69%	95%
Agency	8%	6%	13%	5%
Corporate			19%	
Modified Duration 12/31/2016	1.89	2.68	2.68	3.72
10 Year Annualized Total Return	2.17%	2.76%	2.90%	3.47%
10 Year Standard Deviation	2.57%	3.01%	2.27%	3.95%
Sharpe Ratio	0.53	0.65	0.92	0.68
<b>Qualitative Risk Objective</b>	<b>12/31/1988-12/31/2016</b>	<b>12/31/1988-12/31/2016</b>	<b>12/31/1988 - 12/31/2016</b>	<b>12/31/1988 - 12/31/2016</b>
Negative Quarterly Return Occurrences	11	21	19	30
2 Consecutive Negative Quarterly Return Occurrences	1	2	3	6
Negative Return For Year Occurrences	0	2	1	3
Worst Year Total Return	0.37%	-0.63%	-0.58%	-1.61%

Source: Bank of America Merrill Lynch Indices. Please see Benchmark disclosures at the end of this presentation for further details; Past performance is not indicative of future results. Index returns assume reinvestment of all distributions and do not reflect fees or expenses. It is not possible to invest directly in an index.



# Benchmark Returns

Comparison of 1-3 Yr Government, 1-5 Yr Government, 1-5 Yr Corp A-AAA/Govt & 1-10 Government Benchmarks  
December 31, 2016



Value on 12/31/2016 of \$45 million invested on 12/31/2006

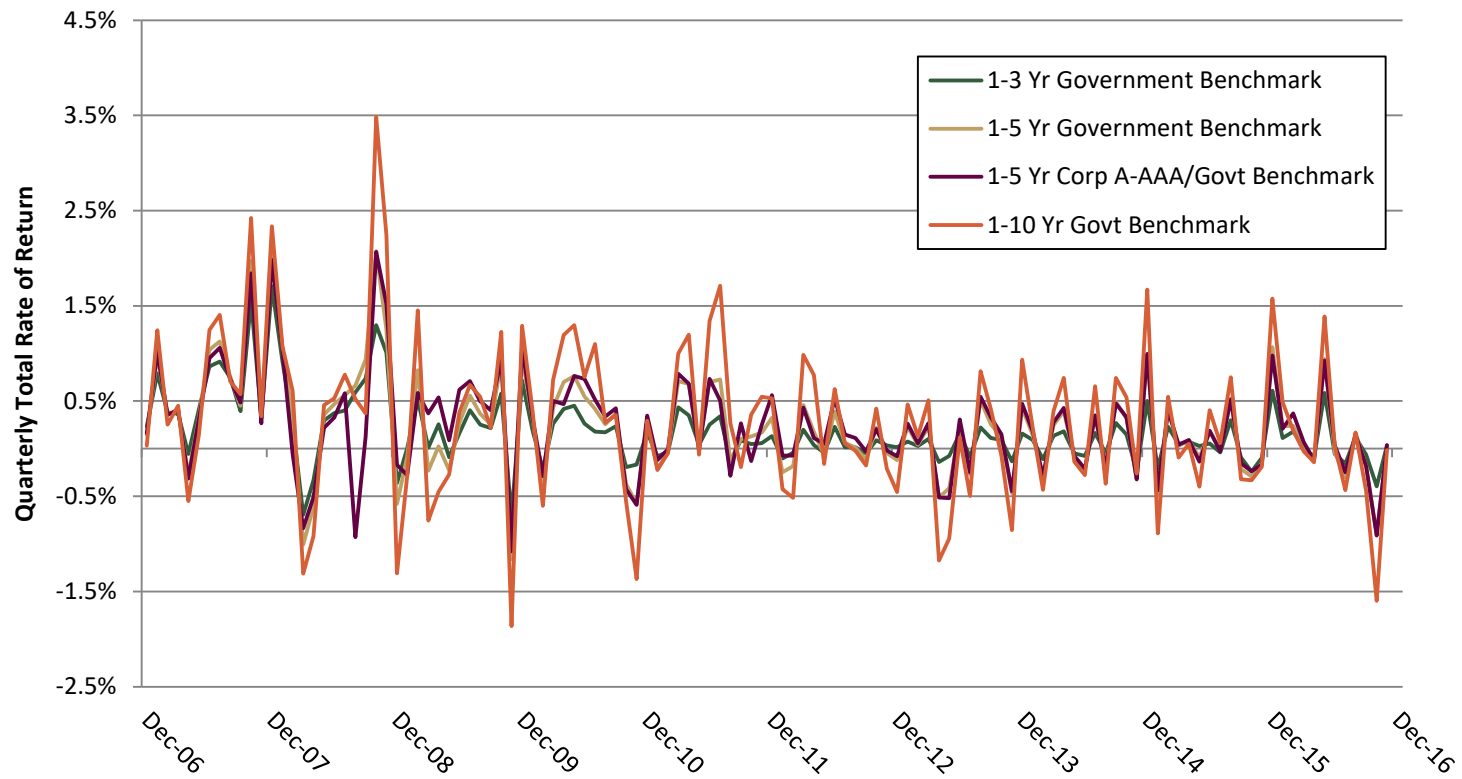
	12/31/2016	Annualized Return
B of A ML 1-3 Yr US Treasury & Agency	\$55,760,406	2.17%
B of A ML 1-5 Yr US Treasury & Agency	\$59,051,954	2.75%
B of A ML 1-5 Yr US Corporate/Govt Rated AAA-A	\$59,871,321	2.90%
B of A ML 1-10 Yr US Treasury & Agency	\$63,280,010	3.47%

Source: Bank of America Merrill Lynch Indices.



# Benchmark Returns

Comparison of Benchmark Index Volatility  
December 31, 2016



Source: Bank of America Merrill Lynch Indices.



# Characteristics of Benchmark Styles

## 10-Year Net of Fee Performance December 2006 – December 2016

Investment Style	Portfolio Duration	Annualized Total Return 10-Year Period	10-Year Growth of \$45 Million Portfolio	Chandler Added Value Over LAIF (Net of Fees)
LAIF	0.47	1.22%	\$50.8 million	N/A
B of A ML 1-3 Yr US Treasury & Agency	1.82	2.07%	\$55.2 million	\$4.4 million
B of A ML 1-5 Yr US Treasury & Agency	2.61	2.65%	\$58.5 million	\$7.7 million
B of A ML 1-5 Yr US Corporate/Govt Rated AAA-A	2.61	2.79%	\$59.3 million	\$8.5 million
B of A ML 1-10 Yr US Treasury & Agency	3.65	3.37%	\$62.7 million	\$11.9 million

*Based on sample annual fee (0.102 of 1% calculated for a \$45 million portfolio), relative to LAIF. LAIF returns include an administrative fee charged to investors by the California State Treasurer. LAIF duration estimated based on average maturity in days, as of December 31, 2016, divided by 365 days. Past performance is not a guarantee of future results. Please see the benchmark disclosures at the end of this presentation for further details.*



# Disclosures

## **Bank of America Merrill Lynch 1-3 Year US Treasury & Agency Index**

The Bank of America Merrill Lynch 1-3 Year US Treasury & Agency Index is comprised of securities issued by entities of the US Government, including the US Treasury and Agencies such as Fannie Mae, Resolution Trust Funding and the Federal Home Loan Bank. Corporate or foreign debt guaranteed by the US Government, such as USAID securities, may also be included in the index. All securities in the index must be investment grade, have fixed coupon rates or rates that change according to a predetermined schedule, and have at least one year but not greater than three years to maturity regardless of any call features.

## **Bank of America Merrill Lynch 1-5 Year US Treasury & Agency Index**

The Bank of America Merrill Lynch 1-5 Year US Treasury & Agency Index is comprised of securities issued by entities of the US Government, including the US Treasury and Agencies such as Fannie Mae, Resolution Trust Funding and the Federal Home Loan Bank. Corporate or foreign debt guaranteed by the US Government, such as USAID securities, may also be included in the index. All securities in the index must be investment grade, have fixed coupon rates or rates that change according to a predetermined schedule, and have at least one year but not greater than five years to maturity regardless of any call features.

## **Bank of America Merrill Lynch US Issuer Corporate & Government, 1-5 Years AAA-A Index**

The Bank of America Merrill Lynch US Issuer Corporate & Government, 1-5 Years AAA-A Index tracks the performance of US issuer dollar-denominated investment grade Government and Corporate public debt issued in the US Domestic bond market. Qualifying bonds must have at least one year but less than five years remaining term to maturity, a fixed coupon schedule and a minimum amount outstanding of \$1 billion for US Treasuries and \$150 million for all other securities. Bonds must be rated A or better based on a composite of Moody's and S&P. The index is re-balanced on the last calendar day of the month.

## **Bank of America Merrill Lynch 1-10 Year US Treasury & Agency Index**

The Bank of America Merrill Lynch 1-10 Year US Treasury & Agency Index is comprised of securities issued by entities of the US Government, including the US Treasury and Agencies such as Fannie Mae, Resolution Trust Funding and the Federal Home Loan Bank. Corporate or foreign debt guaranteed by the US Government, such as USAID securities, may also be included in the index. All securities in the index must be investment grade, have fixed coupon rates or rates that change according to a predetermined schedule, and have at least one year but not greater than ten years to maturity regardless of any call features.